

From: Davis, Minh-Tam 11/27
 Sent: Friday, November 22, 2002 3:27 PM
 To: STIC-Biotech/ChemLib
 Cc: O'Bryen, Barbara
 Subject: Search request for 09/555342

no size limited

Hi Barb,

Could you do me a big favor and search this case for me, since it is complicate? This case will not be due until next biweek.

Please search in commercial database and in issued patent files. Please note this is not a search for primers, but rather a nucleic acid sequence flanked by two primers. Since the following primers are obtained from SEQ ID NO:1, if one knows the position of the nucleotides of the primers, one could also search for a sequence from SEQ IS NO:1, encompassing the outer nucleotide positions obtained from the primers.

- 1) A nucleic acid molecule obtained by PCR, using primers having SEQ ID NOS: 21 and 22. ✓ OS
- 2) A nucleic acid molecule obtained by PCR, using primers having SEQ ID NOS: 13 and 14. ✓
- 3) A nucleic acid molecule obtained by PCR, using primers having SEQ ID NOS: 16 and 18. — sense strand
- 4) A nucleic acid molecule obtained by PCR, using primers having SEQ ID NOS: 16 and 19. ✓
- 5) A nucleic acid molecule obtained by PCR, using primers having SEQ ID NOS: 20 and 19. ✓
- 6) A nucleic acid molecule obtained by PCR, using primers having SEQ ID NOS: 15 and 17. — ant. sense strand

Thank you.

MINH TAM DAVIS

ART UNIT 1642, ROOM 8A01, MB 8E12
 305-2008

seq 13 & 14 seq 20
 151 = 432
 151 - 2501
 1352 - 2501
 1733 - 2501
 seq 16 & 19
 seq 20 & 19
 seq 21 & 22
 1352 - 1373
 1733 - 1752
 685 - 704
 151 - 170
 151 - 170

14 413 - 432
 15 271 - 294
 17 973 - 1003
 19 2482 - 2501
 22 2482 - 2501

seq 21 + 22 = (20 + 20) = 40 residues
 13 + 14 = (20 + 20) = 40 "
 16 + 18 = (20 + 20) = 40 "
 16 + 19 = (20 + 20) = 40 "
 20 + 19 = (20 + 23) = 43 "
 15 + 17 = (25 + 29) = 54 "

RECEIVED
 NOV 22 2002
 STIC

month date
 1997

6/2000
 in seq 21 & 22

Searcher: P. Schreiber
 Phone: 308-4292
 Location: CM 6A03
 Date Picked Up:
 Date Completed: 12/4
 Searcher Prep/Review: 5
 Clerical:
 Online time: 63

TYPE OF SEARCH:
 NA Sequences: 16
 AA Sequences:
 Structures:
 Bibliographic:
 Litigation:
 Full text:
 Patent Family:
 Other:

VENDOR/COST (where applic.)
 STN:
 DIALOG:
 Questel/Orbit:
 DRLink:
 Lexis/Nexis:
 Sequence Sys.: IG Compugen
 WWW/Internet:
 Other (specify):

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150 160 170 180 190 200 210
220 230 240 250 260 270 280
CCACAAGAGCTCTCTGGGAAGTCTGCTGGATGAGTTTGCACACCTCAACCTCTGCTGGAAGTGTACTAT
CCACAAGAGCTCTCTGGGAAGTCTGCTGGATGAGTTTGCACACCTCAACCTCTGCTGGAAGTGTACTAT
220 230 240 250 260 270 280
290 300 310 320 330 340 350 360
TTTGGCCCTCGAGTTCTTGATCACAAAAGATCAGGTGCTGGATCTCCTAAAACCCATTTGGAACAG
TT
TTTGGCCCTCGAGTTCTTGATCACAAAAGATCAGGTGCTGGATCTCCTAAAACCCATTTGGAACAG
290 300 310 320 330 340 350 360
ATTAGAAGCCCAAGCAGTGTGTTAAGTTTGGTGAATTTCTTCCGCTCACCACACACAACTCCAA
TT
ATTAGAAGCCCAAGCAGTGTGTTAAGTTTGGTGAATTTCTTCCGCTCACCACACACAACTCCAA
370 380 390 400 410 420 430
440 450 460 470 480 490 500
GAAGAATCACAAGTACTCTTCCGCTGAGGTGAAGCAGGACTTGGCTCAAGGCAGGTTGACGTCTAAT
TT
GAAGAATCACAAGTACTCTTCCGCTGAGGTGAAGCAGGACTTGGCTCAAGGCAGGTTGACGTCTAAT
440 450 460 470 480 490 500
510 520 530 540 550 560 570
GACACACGCGAGTCTCTTGATTTACACATTTGGCAATCTGAGATTTGGGATTTTTCATGAAGCCTTGGAC
TT
GACACACGCGAGTCTCTTGATTTACACATTTGGCAATCTGAGATTTGGGATTTTTCATGAAGCCTTGGAC
510 520 530 540 550 560 570
580 590 600 610 620 630 640
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TT
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580 590 600 610 620 630 640
650 660 670 680 690 700 710 720
CATAACCACTTGGACAACACACAGCAAGTTCAGATTTCCAGCTCTAGAGATTTCCCGCTCGGCTAGAGTG
TT
CATAACCACTTGGACAACACACAGCAAGTTCAGATTTCCAGCTCTAGAGATTTCCCGCTCGGCTAGAGTG
650 660 670 680 690 700 710 720
730 740 750 760 770 780 790
TATGGAATCCGGTTCCACCCGGCCAAAGCAGAGGAGCAAGATCAATCTGCGCTTCCCAACAGGGA
TT
TATGGAATCCGGTTCCACCCGGCCAAAGCAGAGGAGCAAGATCAATCTGCGCTTCCCAACAGGGA
730 740 750 760 770 780 790
800 810 820 830 840 850 860
ATTCTAGTGTTCAGGTTTTCACATAAGATCAATGCTTCAACTGGCCAGGTGCGGAAGCTGAGCTTCAAG
TT
ATTCTAGTGTTCAGGTTTTCACATAAGATCAATGCTTCAACTGGCCAGGTGCGGAAGCTGAGCTTCAAG
800 810 820 830 840 850 860
870 880 890 900 910 920 930
AGGAAGCGCTTTCATCACTCAAGCTCGGCGCAGATCCCAATAGTGGTACCAGACACTTGGAAATCTCTGATG
TT
AGGAAGCGCTTTCATCACTCAAGCTCGGCGCAGATCCCAATAGTGGTACCAGACACTTGGAAATCTCTGATG
870 880 890 900 910 920 930
940 950 960 970 980 990 1000
GCCAGTCGGGATTTCTGCAAGTCTCTTGGAAAATCTGTGTTGAACATCATGCTTCTTTAGACTTTTGGAA
TT
GCCAGTCGGGATTTCTGCAAGTCTCTTGGAAAATCTGTGTTGAACATCATGCTTCTTTAGACTTTTGGAA
940 950 960 970 980 990 1000
1010 1020 1030 1040 1050 1060 1070 1080
GAGCCAAACCAAGCCCAAGCCGCTCTCTTTAGCCGGGGTTCATCATTTTCGGTTCAGTTCGCGACTCAG
TT
GAGCCAAACCAAGCCCAAGCCGCTCTCTTTAGCCGGGGTTCATCATTTTCGGTTCAGTTCGCGACTCAG
1010 1020 1030 1040 1050 1060 1070 1080

1090 1100 1110 1120 1130 1140 1150
AAGCAGGTTCTCGACTATGTTAAAGAGGAGACATAGAAGGTGACGTTTGAAGGAGCACACAGCAAGTT
TT
AAGCAGGTTCTCGACTATGTTAAAGAGGAGACATAGAAGGTGACGTTTGAAGGAGCACACAGCAAGTT
1090 1100 1110 1120 1130 1140 1150
1160 1170 1180 1190 1200 1210 1220
CATTTCTCCGAGCCTTGTTCACAGCCTACAGACTGAATTCGGAAGTCTGGAGAGTCTCAGCAGAGC
TT
CATTTCTCCGAGCCTTGTTCACAGCCTACAGACTGAATTCGGAAGTCTGGAGAGTCTCAGCAGAGC
1160 1170 1180 1190 1200 1210 1220
1230 1240 1250 1260 1270 1280 1290
ACCAGCCTTACATTTGGAGAGGTGCCGAATCTCAGGGGCCAGAGCTCCGCGGAGGAAGCAAGCCGAG
TT
ACCAGCCTTACATTTGGAGAGGTGCCGAATCTCAGGGGCCAGAGCTCCGCGGAGGAAGCAAGCCGAG
1230 1240 1250 1260 1270 1280 1290
1300 1310 1320 1330 1340 1350 1360
GTTTTCGCGGGAGCCGGGTCCACCCGAGCCTCGCGGAGGAGAGCCCGCGGTTAACRAGCAGGCG
TT
GTTTTCGCGGGAGCCGGGTCCACCCGAGCCTCGCGGAGGAGAGCCCGCGGTTAACRAGCAGGCG
1300 1310 1320 1330 1340 1350 1360
1370 1380 1390 1400 1410 1420 1430 1440
GACGAGCCGCTCGCGGCCACCGAGGAGGAGGAGGTCTTAAAGTATAGGACCCAGCAGAGTAAACCT
TT
GACGAGCCGCTCGCGGCCACCGAGGAGGAGGAGGTCTTAAAGTATAGGACCCAGCAGAGTAAACCT
1370 1380 1390 1400 1410 1420 1430 1440
1450 1460 1470 1480 1490 1500 1510
CAGCCCGCAGCAACACAGGCTCCTGACTGCGAGTCTCCTACCTTCCGAGCTGTCTGTAACCTGCGAG
TT
CAGCCCGCAGCAACACAGGCTCCTGACTGCGAGTCTCCTACCTTCCGAGCTGTCTGTAACCTGCGAG
1450 1460 1470 1480 1490 1500 1510
1520 1530 1540 1550 1560 1570 1580
GGGGAGTGGCCCTGCAACAGTCACTTGTCTCCCACTGAGCCCGCACCAACAGCAGGCTCTCCCTTG
TT
GGGGAGTGGCCCTGCAACAGTCACTTGTCTCCCACTGAGCCCGCACCAACAGCAGGCTCTCCCTTG
1520 1530 1540 1550 1560 1570 1580
1590 1600 1610 1620 1630 1640 1650
ATCAGCCGCTGCTGAATGACAGGCTTCCCGCGGAGGAGTATGAGGATGAGGCGCGGAGGAGAGATTC
TT
ATCAGCCGCTGCTGAATGACAGGCTTCCCGCGGAGGAGTATGAGGATGAGGCGCGGAGGAGAGATTC
1590 1600 1610 1620 1630 1640 1650
1660 1670 1680 1690 1700 1710 1720
CCAATGATAAAGCGTACTTTCATAGCTAAGGAAGTGTCTACCAGGAGCAACATATCTGAAGGATCTCGAA
TT
CCAATGATAAAGCGTACTTTCATAGCTAAGGAAGTGTCTACCAGGAGCAACATATCTGAAGGATCTCGAA
1660 1670 1680 1690 1700 1710 1720
1730 1740 1750 1760 1770 1780 1790 1800
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GTTATCACTTCTGCTGTTTCAGAGCACAGTGAAGAGGAGGAGCCATCCCGGAGGAGTGAAGTCTCATTA
1730 1740 1750 1760 1770 1780 1790 1800
1810 1820 1830 1840 1850 1860 1870 1880
TTCCCGAATTTGAACCTTTGCAAAAATTTTCATATACTAATTTCTCAAGGAATTCAGCAACGACTTCCCTG
TT
TTCCCGAATTTGAACCTTTGCAAAAATTTTCATATACTAATTTCTCAAGGAATTCAGCAACGACTTCCCTG
1810 1820 1830 1840 1850 1860 1870 1880
1890 1900 1910 1920 1930 1940
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TT
TGGGAAGCCGCTCAAAATGCGCAATCAGAGATTACCAAGAAATCGCGGATGTCTGCTGAAGAACATTCAG
1890 1890 1900 1900 1910 1910 1920 1920 1930 1930 1940 1940

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GCATGAAGCACTGGCGGCTCACCTGTGGAAGCACAGGAGCCCTTGAGGCCCTTGGAATGAATCAAG
2020 2030 2040 2050 2060 2070 2080
AGCTCCCGGCGGCTGGAGAACTTCTGCAGAGACTTTGAGCTGCAGAAAGTGTGTTACCTACCGCTCAACACC
2020 2030 2040 2050 2060 2070 2080
AGCTCCCGGCGGCTGGAGAACTTCTGCAGAGACTTTGAGCTGCAGAAAGTGTGTTACCTACCGCTCAACACC
2090 2100 2110 2120 2130 2140 2150 2160
TTCTCTCTCGGCGCACTGCACCGGCTCATGTCAAGCAGGTCCTGAGCGGCTGTCAACACACCCCG
2090 2100 2110 2120 2130 2140 2150 2160
TTCTCTCTCGGCGCACTGCACCGGCTCATGTCAAGCAGGTCCTGAGCGGCTGTCAACACACCCCG
2090 2100 2110 2120 2130 2140 2150 2160
TTCTCTCTCGGCGCACTGCACCGGCTCATGTCAAGCAGGTCCTGAGCGGCTGTCAACACACCCCG
2170 2180 2190 2200 2210 2220 2230
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2170 2180 2190 2200 2210 2220 2230
CCGAGCCAGCCGCACTTCAGGGACTGCCGAGCGCTTTGGCAGAGATCAGGAGATGTTGGCAGACTCCAC
2240 2250 2260 2270 2280 2290 2300
GGTACGATGATCAAGATGAGAAATTTCCAGAACTGCACGAATCAAGAAAGATTTGATTGGCATTGACAAT
2240 2250 2260 2270 2280 2290 2300
GGTACGATGATCAAGATGAGAAATTTCCAGAACTGCACGAATCAAGAAAGATTTGATTGGCATTGACAAT
2310 2320 2330 2340 2350 2360 2370
CTTGTGGTTCCCGGAAGGAGTTCATCCGTCCTGGCAGCTCAGCAAGCTCTCGGGGAAGGGGCTCCAGCAG
2310 2320 2330 2340 2350 2360 2370
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2380 2390 2400 2410 2420 2430 2440
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2380 2390 2400 2410 2420 2430 2440
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2450 2460 2470 2480 2490 2500 2510 2520
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2450 2460 2470 2480 2490 2500 2510 2520
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2530 2540 2550 2560 2570 2580 2590
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2530 2540 2550 2560 2570 2580 2590
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2600 2610 2620 2630 2640 2650 2660
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2600 2610 2620 2630 2640 2650 2660
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2670 2680 2690 2700 2710 2720 2730
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2670 2680 2690 2700 2710 2720 2730
CCCCCTGACAACAAGTCCCTGATGAAGCCACCGCGGCTGACGAGATCAGAGATGACCTGAGCGCCTCG
2740 2750 2760 2770 2780 2790 2800
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2740 2750 2760 2770 2780 2790 2800
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2810 2820 2830 2840 2850 2860 2870 2880
CGACATCGCTGAGCGCCAGCGCCCGCAGCGGCAACAATGTCGACCTGTGCTGGCAGCCGCAACAC
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2810 2820 2830 2840 2850 2860 2870 2880
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2890 2900 2910 2920 2930 2940 2950
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2960 2970 2980 2990 3000 3010 3020
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2960 2970 2980 2990 3000 3010 3020
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3030 3040 3050 3060 3070 3080 3090
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3030 3040 3050 3060 3070 3080 3090
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3100 3110 3120 3130 3140 3150 3160
TTCGAAAGGTGATGGAAGTATCCGCACTGCGCAGTCCACAGCTCTGCTCGGACCCACGTTTGAGCCAAA
3100 3110 3120 3130 3140 3150 3160
TTCGAAAGGTGATGGAAGTATCCGCACTGCGCAGTCCACAGCTCTGCTCGGACCCACGTTTGAGCCAAA
3170 3180 3190 3200 3210 3220 3230 3240
GAGTCTCTTGTGATTGATGGCGGACACACTCGTTCCGCACTGCTTCTGGAAGAGCTTTCCTTT
3170 3180 3190 3200 3210 3220 3230 3240
GAGTCTCTTGTGATTGATGGCGGACACACTCGTTCCGCACTGCTTCTGGAAGAGCTTTCCTTT
3250 3260 3270 3280 3290 3300 3310
CTTCTGATTATTAAGCTGTGTAATAATTAACACCTGTCTGAAATCAAAACATGGCTTCCAGCAGCTCT
3250 3260 3270 3280 3290 3300 3310
CTTCTGATTATTAAGCTGTGTAATAATTAACACCTGTCTGAAATCAAAACATGGCTTCCAGCAGCTCT
3320 3330 3340 3350 3360 3370 3380
CTGTCCTCCACAGCCCGCTTTTAAACCCCGACCTCTCAGCGTTTCAATGAACAGCGCTCCCACTCCAGTC
3320 3330 3340 3350 3360 3370 3380
CTGTCCTCCACAGCCCGCTTTTAAACCCCGACCTCTCAGCGTTTCAATGAACAGCGCTCCCACTCCAGTC
3390 3400 3410 3420 3430 3440 X
CTGGCATCCGCTGGGGCGCTGTTCTTAGCTAGTCCAGTATTAACATTTGTCATT
3390 3400 3410 3420 3430 3440 X
CTGGCATCCGCTGGGGCGCTGTTCTTAGCTAGTCCAGTATTAACATTTGTCATT
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2. US-09-555-342B-1 (1-3442)
US-09-555-342B-2 Sequence 20, Application US/09555342B

Sequence 20, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-502505

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn ver. 2.0

SEQ ID NO 20

LENGTH: 23

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 23 Optimized Score = 23 Significance = -0.20
Residue Identity = 100% Matches = 23 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

1310 1320 1330 1340 1350 X 1360 1370
CGCCGGGAGCGGGTCCGACCCGAGCCTCGCGGAGGAGAGCGGTAACAGCGCGGACGG
|||||
CGGGTAACAAGCAGCGCGGACGG X 10 20

X 1380 1390 1400 1410 1420
ACCCGCTCGGCGCCACGAGGAGGAGGAGGTCGTTAAGGATAGGAC
|
A
X

3. US-09-555-342B-1 (1-3442)
US-09-555-342B-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, YUKIO
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 20 Optimized Score = 20 Significance = -0.21
Residue Identity = 100% Matches = 20 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

1690 1700 1710 1720 1730 X 1740 1750 X
TAAGGAAGTGTACACCGGAGCGACATATCTGAGGATCTCGAAGTATACACTTCGTGGTTTCAGAGCAC
|||||
TCACCTCGTGGTTTCAGAGC X 10 20

1760 1770 1780 1790 1800
ACTGACAAAGAGGAGCGCATCCGGAAGCACTGAAAAGTCTCATATT

4. US-09-555-342B-1 (1-3442)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, YUKIO
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 20 Optimized Score = 20 Significance = -0.21
Residue Identity = 100% Matches = 20 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

640 650 660 670 680 X 690 700 X
TCGTGGAAATTCACCATTAACCATTTGGACAACACGACGAGATTCAGATTTCAGCTCTCTAGAGATTGCC
|||||
TTCCAGCTCTCTAGAGATTGC X 10 20

710 720 730 740 750
GTCGGCTAGAGATGTGGAATCCGGTTGCACCCGCGCAAGACAGGG

5. US-09-555-342B-1 (1-3442)
US-09-555-342B-1 Sequence 16, Application US/09555342B

Sequence 16, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, YUKIO
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 20 Optimized Score = 20 Significance = -0.21
Residue Identity = 100% Matches = 20 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

110 120 130 140 150 160 X
AAAAATCGGGATCAGTACCTTGGAAACGTGGACAGAGCGCCGCAACACTTCAGGAAAACCTCGTGTCCA
|||||
CCTTCAGGAAAACCTCGTGT X 10 20

180 190 200 210 220
TCAAAATCCAGATGCTGGATGACACCCAGAGGCATTTGAAGTTCCAC

6. US-09-555-342B-1 (1-3442)
US-09-555-342B-1 Sequence 13, Application US/09555342B

Sequence 13, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, YUKIO
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 20 Optimized Score = 20 Significance = -0.21
Residue Identity = 100% Matches = 20 Mismatches = 0
Gaps = 0 Conservative Substitutions = 0

110 120 130 140 150 160 X
AAAAATCGGGGATCAGTACCTTGGAACTGGACAGAGCGCCCGCCCAACACCTTCAGGAAACTCGTGTCCA
|||||
CCTTCAGGAAACTCGTGT
X 10 20

180 190 200 210 220
TCAAAATCCAGATGCTGGATGACACCCAGGAGGCATTTGAAGTTCCAC

7. US-09-555-342B-1 (1-3442)
US-09-555-342B-1 Sequence 17, Application US/09555342B

Sequence 17, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 17

LENGTH: 29

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 14 Optimized Score = 15 Significance = -0.22
Residue Identity = 37% Matches = 19 Mismatches = 10
Gaps = 8 Conservative Substitutions = 0

70 80 90 100 110 120 130
GAGGCGGACCCAGGATCAGCTGCGGCGGCGGAAATTCGGGGATCAGTACCTTGGAACTGGACAGAA
|||
AAACGGAAGAAAGTGT---TGRT
X 10

140 150 X 160 170 180 190 200
GCGGCCCCACACCTTCAGGAAACTCGTGTCCATCAAAATCCAGATGCTGGATGACACCCAGG
| | | | |
G-----YTCWACACA
20 X

8. US-09-555-342B-1 (1-3442)
US-09-555-342B-1 Sequence 12, Application US/09555342B

Sequence 12, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 12

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 13 Optimized Score = 14 Significance = -0.22
Residue Identity = 71% Matches = 15 Mismatches = 5
Gaps = 1 Conservative Substitutions = 0

90 100 110 120 130 140 X
ATCAGACTGGGGGCCCGGAAATTCGGGGATCAGTACCTTGGAACTGGACAGAGCGCCCGCCCAACACC
|||||
CACAGACCCAGTCCCAAC-AC
X 10 20

160 170 180 190 200
TTCAGGAAACTCGTGTCCATCAAAATCCAGATGCTGGATGACACCCAG

9. US-09-555-342B-1 (1-3442)
US-09-555-342B-4 Sequence 4, Application US/09555342B

Sequence 4, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 4

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 13 Optimized Score = 14 Significance = -0.22
Residue Identity = 68% Matches = 15 Mismatches = 5
Gaps = 2 Conservative Substitutions = 0

460 470 480 490 500 X 510 520 X
TTCGCGCTGCAGGTGAAGCAGGACGTGGCTCAAGGAGGTTCAGCTGTGAATCAGACCCAGGCTCTCTTG
|||
TG---CCCAGTTCAGGTCTCTTA
X 10 20

530 540 550 560 570
ATTTCACACATTGTGCAATCTGAGATTGGGGATTTTGATGAAGCCTTGA

10. US-09-555-342B-1 (1-3442)

US-09-555-342B-1 Sequence 11, Application US/09555342B

Sequence 11, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 11

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 12 Optimized Score = 12 Significance = -0.22
Residue Identity = 60% Matches = 12 Mismatches = 8
Gaps = 0 Conservative Substitutions = 0

ATCAGACTGGGGCCCGGAAATTCGGGATCAGTACCTTGAACGTGCACAGAGCCGCCCCCAACACC
||||| ||| |||||
X 10 140 X
ATCAGACCCAGCTCCCAAG 20

160 170 180 190 200
TTCAGGAAACTCGTGTCCATCAAAATCCAGATCTGGATGACACCCA

11. US-09-555-342B-1 (1-3442)

US-09-555-342B-1 Sequence 15, Application US/09555342B

Sequence 15, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 15

LENGTH: 25

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 12 Optimized Score = 14 Significance = -0.22
Residue Identity = 60% Matches = 17 Mismatches = 8
Gaps = 3 Conservative Substitutions = 0

2390 2400 2410 2420 2430 2440 2450
TGTTCTTCTTCAAGCAGCTCTGCTATACAGCGCGGGGCTGACGGCTCCCAATCATGTTTAAAGTCC
||||| ||| ||| ||| |||
GCC-AAAT-AG-TCACCTTCC 10
X

2460 2470 2480 2490 2500
ACGGGCACTCCCGTCTATGGCATGACGATTGAGGAGCGAAGACGAGTGGGGG

|||||
ACGAGG
20 X

12. US-09-555-342B-1 (1-3442)
US-09-555-342B-3 Sequence 3, Application US/09555342B

Sequence 3, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 3

LENGTH: 25

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 12 Optimized Score = 15 Significance = -0.22
Residue Identity = 60% Matches = 17 Mismatches = 8
Gaps = 3 Conservative Substitutions = 0

2180 2190 2200 2210 2220 2230 2240
ACTTCAGGAGTGCAGCGCCCTTTGGCAGAGATCAGGAGATGTTGTCACGATCGTCCAGTCCACGTCAGTATCA
||| ||| ||||| |||
CA--TAC-CGGTAAGTGGGCA 10
X

2250 2260 2270 2280 2290 2300
AGATGGAGAAATTCAGAGCTGCACGAAGTCAAGAAAGATTGATTGGCATTCGAC
|||||
AGACTG
20 X

13. US-09-555-342B-1 (1-3442)

US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 9

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 10 Optimized Score = 13 Significance = -0.22
Residue Identity = 65% Matches = 17 Mismatches = 2
Gaps = 7 Conservative Substitutions = 0

1880 1890 1900 1910 1920 X 1930 1940
GGGAGGCGCTCAATGCCAATCAGAGATTACCAAGAATCGCGGATGTC-ATGCTGAAGAACATTCAG
||| | ||| | ||| | ||| |
GTCAAGGCTG-AGAAC-----G
X 10

X 1960 1970 1980 1990
GGCATGAAGACCTGGCGGCTCACCTGTGTGAAGCACAGCGAGGCCTTGGAGGCC
|| |
GGAA
20

14. US-09-555-342B-1 (1-3442)
US-09-555-342B-8 Sequence 8, Application US/09555342B

Sequence 8, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Tetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 8

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 10 Optimized Score = 13 Significance = -0.22
Residue Identity = 66% Matches = 16 Mismatches = 4
Gaps = 4 Conservative Substitutions = 0

820 830 840 850 860 X 870 880
CTAAGATCAATGCCCTCAACTGGGCCAAGGTCGGAAGCTGAGCTTCAAGAGGAAGCGGCTTCTTCATCAAGC
||| | ||| | ||| | ||| |
ATGAA---CTTCTTCA-CCAGC
X 10

X 900 910 920 930
TCCGGCCAGATGCCAATAGTGCCTACCGAGTACCTTGGAAATTCCTGATGGC
||
TC
20

15. US-09-555-342B-1 (1-3442)
US-09-555-342B-6 Sequence 6, Application US/09555342B

Sequence 6, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Tetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 6

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 10 Optimized Score = 12 Significance = -0.22
Residue Identity = 58% Matches = 14 Mismatches = 6
Gaps = 4 Conservative Substitutions = 0

210 220 230 240 250 260 270 280
TTGAAGTTCACAAAGAGCTCTCTGGGAAGTGCTGCTGGATGCAGTTTCCAAACCACTCAACCTCGTGAAG
|| | ||| | ||| |
AAAGACCTCACCTC-----CAT
X 10

X 290 300 310 320 330
GTGACTATTTTGGCCTCGAGTTTCTCTGATCACAAAAAGATCACGGGTGTGGCT
|
CT
20

16. US-09-555-342B-1 (1-3442)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Tetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 14

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 9 Optimized Score = 12 Significance = -0.22
Residue Identity = 59% Matches = 16 Mismatches = 4
Gaps = 7 Conservative Substitutions = 0

2850 2860 2870 2880 2890 X 2900 2910
GAGAAATCAGTTGCTCTGGAAACCTGCTGAGGAATTCAAAAACAGCAACGGGTGGCAGAAAGCTGTGGTGGTG
||| | ||| | ||| |
TTGG----AGTTGTGTGTGG--
X 10

X 2930 2940 2950 2960
TTCACAAACTTCTGCTGTTCTTCTACAAAATCACACAGGACAATCATCCCTTGT
|||
-TCAG
20

17. US-09-555-342B-1 (1-3442)
US-09-555-342B-1 Sequence 10, Application US/09555342B

Sequence 10, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

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PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 15
LENGTH: 25
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 6 Significance = 1.39
Residue Identity = 66% Matches = 6 Mismatches = 3
Gaps = 0 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCTCCTGAAGG
|||||
GCCAAATAAGTACCTTCCACGAGG
10 X 20 X

3. US-09-555-342B-13' (1-20)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 1.04
Residue Identity = 50% Matches = 9 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCTCCTGAAGG
|||||
TTGGAGTTGT-GTGTGGTCAG
X 10 X 20

4. US-09-555-342B-13' (1-20)
US-09-555-342B-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 22
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.69
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X
GACACGAGTTTCTCCTGAAGG
|||
TCGTC-TTCGCTCTCCTCAAT
X 10 20

5. US-09-555-342B-13' (1-20)
US-09-555-342B-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.69
Residue Identity = 55% Matches = 11 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 X
GAC-ACGAGTTTCTCCTGAAGG
|||
TCACCTCGTGGTTT-CAGAGC
X 10 20

6. US-09-555-342B-13' (1-20)
US-09-555-342B-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 20
TYPE: DNA

ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.69
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10
GACACGAGTTTCTCTGAAGG
||| |||||
TCGTC-TTCGCTCTCTCAAT
X 10 20

7. US-09-555-342B-13' (1-20)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOVANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-50250S
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.69
Residue Identity = 50% Matches = 9 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCTCTGAAGG
||| |||||
TTCAG--CTCCTAGAGATTCC
X 10 X 20

8. US-09-555-342B-13' (1-20)
US-09-555-342B-1 Sequence 10, Application US/09555342B

Sequence 10, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOVANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-50250S
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.69
Residue Identity = 55% Matches = 11 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 X
GACACGA--GTTTCTCTGAAGG
||| |||||
TCCACCACTCTGTGCTGTA
X 10 20

9. US-09-555-342B-13' (1-20)
US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOVANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-50250S
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 9
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 6 Significance = 0.69
Residue Identity = 50% Matches = 8 Mismatches = 5
Gaps = 3 Conservative Substitutions = 0

X 10 20
GACACGAGT-TTTCCT--GAAGG
||| |||||
GTCAAGGCTGAGACGGAA
X 10 X 20

10. US-09-555-342B-13' (1-20)
US-09-555-342B-8 Sequence 8, Application US/09555342B

Sequence 8, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOVANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-50250S
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 8
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 5 Significance = 0.69
Residue Identity = 31% Matches = 5 Mismatches = 11

Gaps = 0 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCTCTGAAGG
||| |
ATGAACCTTCTCACCAGCTC
X 10 X 20

GACACGAGTTTCTCTGAAGG
||| |
AAACGRAAGA-AYGTRTGTGTCTWACACA
10 20 X

11. US-09-555-342B-13' (1-20)
US-09-555-342B-4 Sequence 4, Application US/09555342B

Sequence 4, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-50250S
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 4
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.69
Residue Identity = 47% Matches = 9 Mismatches = 7
Gaps = 3 Conservative Substitutions = 0

X 10 X 20
GACACG----AGTTTCTCTGAAGG
||| |
TGCCCGAGTTCAGGTCCTTA
X 10 20

12. US-09-555-342B-13' (1-20)
US-09-555-342B-1 Sequence 17, Application US/09555342B

Sequence 17, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-50250S
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 17
LENGTH: 29
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 11 Significance = 0.69
Residue Identity = 40% Matches = 12 Mismatches = 7
Gaps = 1 Conservative Substitutions = 0

X 10 20

PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 0.24
Residue Identity = 50% Matches = 9 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X
CTGACACACA-CACAACTCCAA
|||||
CCTTCAGGAAACTCGTGTC
X 10 20

3. US-09-555-342B-14' (1-20)
US-09-555-342B-1 Sequence 13, Application US/09555342B

Sequence 13, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 0.24
Residue Identity = 50% Matches = 9 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X
CTGACACACA-CACAACTCCAA
|||||
CCTTCAGGAAACTCGTGTC
X 10 20

4. US-09-555-342B-14' (1-20)
US-09-555-342B-1 Sequence 10, Application US/09555342B

Sequence 10, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 10

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 0.24
Residue Identity = 45% Matches = 9 Mismatches = 10
Gaps = 1 Conservative Substitutions = 0

X 10 X
CTGACACACAC-ACAACCTCCAA
|||||
TCCACACCCCTGTTGCTGTA
X 10 20

5. US-09-555-342B-14' (1-20)
US-09-555-342B-6 Sequence 6, Application US/09555342B

Sequence 6, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 10 Significance = 0.24
Residue Identity = 60% Matches = 12 Mismatches = 5
Gaps = 3 Conservative Substitutions = 0

X 10 X
CTGACACACACACAACTCCAA
|||||
AAAGACCTCAC---CCTCCATCT
X 10 20

6. US-09-555-342B-14' (1-20)
US-09-555-342B-1 Sequence 17, Application US/09555342B

Sequence 17, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 17
LENGTH: 29

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 0.24
Residue Identity = 53% Matches = 10 Mismatches = 3
Gaps = 2 Conservative Substitutions = 0

X 10 X 20
CTGAC-CCAC-ACACAACCTCCAA
|||||
AAACGRAAGAAAGTGTGTCWACACA
10 X 20 X

7. US-09-555-342B-14' (1-20)
US-09-555-342B-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KAWANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 22

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.00
Residue Identity = 45% Matches = 9 Mismatches = 11
Gaps = 0 Conservative Substitutions = 0

X 10 X
CTGACCACACACAACCTCCAA
|||||
TCGCTCTCGCTCTCCTCAAT
X 10 20

8. US-09-555-342B-14' (1-20)
US-09-555-342B-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KAWANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.00
Residue Identity = 45% Matches = 9 Mismatches = 11
Gaps = 0 Conservative Substitutions = 0

X 10 X
CTGACCACACACAACCTCCAA
|||||
TCGCTCTCGCTCTCCTCAAT
X 10 20

9. US-09-555-342B-14' (1-20)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KAWANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 18

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.00
Residue Identity = 58% Matches = 7 Mismatches = 5
Gaps = 0 Conservative Substitutions = 0

10 X 20
CTGACCACACACAACCTCCAA
|||||
TTCCAGCTCCTAGAGATTGC
X 10 X 20

10. US-09-555-342B-14' (1-20)
US-09-555-342B-1 Sequence 12, Application US/09555342B

Sequence 12, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KAWANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 12

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 11 Significance = 0.00

Residue Identity = 64% Matches = 11 Mismatches = 6
Gaps = 0 Conservative Substitutions = 0

X 10 20
CTGACCACACAACTCCAA
|| || || || || ||
CACAGACCCAGCTCCCAAC
X 10 X 20

X 10 X 20
CTGACCACACAACTCCAA
|| || || || || ||
GTCAAGGCTGAGAACGGAA
10 20

11. US-09-555-342B-14' (1-20)
US-09-555-342B-1 Sequence 11, Application US/09555342B

Sequence 11, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 11

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 12 Significance = 0.00
Residue Identity = 70% Matches = 12 Mismatches = 5
Gaps = 0 Conservative Substitutions = 0

X 10 20
CTGACCACACAACTCCAA
|| || || || || ||
ATCAGACCCAGCTCCCAAG
X 10 X 20

12. US-09-555-342B-14' (1-20)
US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 9

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.00
Residue Identity = 53% Matches = 7 Mismatches = 6
Gaps = 0 Conservative Substitutions = 0

FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3

LENGTH: 25
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 8 Optimized Score = 11 Significance = 0.90
Residue Identity = 52% Matches = 13 Mismatches = 10
Gaps = 2 Conservative Substitutions = 0

X 10 20 X
CCT-CGTGGAAG-GTGACTATTTTGGC
| | | | | | | | | |
CATACCGGTAAGTGGGGCAAGACTG
X 10 20 X

3. US-09-555-342B-15' (1-25)
US-09-555-342B-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21

LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 9 Significance = 0.54
Residue Identity = 52% Matches = 9 Mismatches = 8
Gaps = 0 Conservative Substitutions = 0

X 10 X 20
CCTCGTGGGAGGTGACTATTTTGGC
| | | | | | | | | |
TCACCTCGTGGTTTCAGAGC
X 10 20

4. US-09-555-342B-15' (1-25)
US-09-555-342B-1 Sequence 16, Application US/09555342B

Sequence 16, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16

LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 6 Significance = 0.54
Residue Identity = 66% Matches = 6 Mismatches = 3
Gaps = 0 Conservative Substitutions = 0

X X X 20
CCTCGTGGGAGGTGACTATTTTGGC
| | | | | | | | | |
CCTTCAGGAAAACCTCGTGTC
10 X 20

5. US-09-555-342B-15' (1-25)
US-09-555-342B-1 Sequence 13, Application US/09555342B

Sequence 13, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13

LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 6 Significance = 0.54
Residue Identity = 66% Matches = 6 Mismatches = 3
Gaps = 0 Conservative Substitutions = 0

X X X 20
CCTCGTGGGAGGTGACTATTTTGGC
| | | | | | | | | |
CCTTCAGGAAAACCTCGTGTC
10 X 20

6. US-09-555-342B-15' (1-25)
US-09-555-342B-7 Sequence 7, Application US/09555342B

Sequence 7, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 7

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 8 Significance = 0.54
Residue Identity = 50% Matches = 10 Mismatches = 7
Gaps = 3 Conservative Substitutions = 0

X 10 X
CCTCGTGAAGGTGA---CTATTTTGGC
||||| | | | |
GTCGATTACGTGGAGAGCTA
X 10 20

7. US-09-555-342B-15' (1-25)
US-09-555-342B-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 22

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.18
Residue Identity = 40% Matches = 8 Mismatches = 12
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
CCTCGTGAAGGTGACTATTTTGGC
||||| | | | |
TCGTCTTCGCTCTCCTCAAT
X 10 20

8. US-09-555-342B-15' (1-25)
US-09-555-342B-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.18
Residue Identity = 40% Matches = 8 Mismatches = 12
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
CCTCGTGAAGGTGACTATTTTGGC
||||| | | | |
TCGTCTTCGCTCTCCTCAAT
X 10 20

9. US-09-555-342B-15' (1-25)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 14

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 5 Significance = 0.18
Residue Identity = 35% Matches = 5 Mismatches = 9
Gaps = 0 Conservative Substitutions = 0

10 X 20 X
CCTCGTGAAGGTGACTATTTTGGC
||||| | | | |
TTGGAGTTGTGTGTGTCAG
X 10 X 20

10. US-09-555-342B-15' (1-25)
US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 9

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.18
Residue Identity = 47% Matches = 10 Mismatches = 9
Gaps = 2 Conservative Substitutions = 0

X 10 20 X
CCTCGTGGAGGTGACTATTGTGGC
||| | | | | | |
GTCAAGGCTGAGAA--CGGGAA
X 10 20

11. US-09-555-342B-15' (1-25)
US-09-555-342B-6 Sequence 6, Application US/09555342B

Sequence 6, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.18
Residue Identity = 47% Matches = 10 Mismatches = 5
Gaps = 6 Conservative Substitutions = 0

X 10 X
CCTCGTGGAGGTGACTATTGTGGC
||| | | | | | |
AAAGACCTC---ACCCT--CCATCT
X 10 20

12. US-09-555-342B-15' (1-25)
US-09-555-342B-4 Sequence 4, Application US/09555342B

Sequence 4, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 4
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.18

Residue Identity = 57% Matches = 12 Mismatches = 6
Gaps = 3 Conservative Substitutions = 0

X 10 X
CCTCGTGGAGGTGACTATTGTGGC
||| | | | | | |
TGCCCAAGT-TCAGGT--CTCTTA
X 10 20

PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 15
LENGTH: 25

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 6 Significance = 1.39
Residue Identity = 66% Matches = 6 Mismatches = 3
Gaps = 0 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCCCTGAAGG
|||||
GCCAAATAGTCACCTCCACGAGG
10 X 20 X

3. US-09-555-342B-16' (1-20)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 14

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 1.04
Residue Identity = 50% Matches = 9 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCCCTGAAGG
|||||
TTGGAGTTGT-GTGTGTCAG
X 10 X 20

4. US-09-555-342B-16' (1-20)
US-09-555-342B-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 15

LENGTH: 25

TYPE: DNA

SEQ ID NO 22
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.69
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X
GACACGAGTTTCCCTGAAGG
|||||
TCGTC-TTCGCTCTCCTCAAT
X 10 20

5. US-09-555-342B-16' (1-20)
US-09-555-342B-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 21

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.69
Residue Identity = 55% Matches = 11 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 X
GAC-ACGAGTTTCCCTGAAGG
|||||
TCACTCGTGGTTT-CAGAGC
X 10 20

6. US-09-555-342B-16' (1-20)
US-09-555-342B-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.69
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10
GACACGAGTTTCTCTGAAGG
||| |||||
TCGTC-TTCGCTCTCTCAAT
X 10 20

7. US-09-555-342B-16' (1-20)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOVANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 18

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.69
Residue Identity = 50% Matches = 9 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCTCTGAAGG
||| |||||
TTCAG-CTCCTAGAGATTCC
X 10 X 20

8. US-09-555-342B-16' (1-20)
US-09-555-342B-1 Sequence 10, Application US/09555342B

Sequence 10, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOVANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 10

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.69
Residue Identity = 55% Matches = 11 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 X
GACACGA--GTTTCTCTGAAGG
||| | |||||
TCCACCACCTGTTGCTGTA
X 10 20

9. US-09-555-342B-16' (1-20)
US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOVANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 9

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 6 Significance = 0.69
Residue Identity = 50% Matches = 8 Mismatches = 5
Gaps = 3 Conservative Substitutions = 0

X 10 20
GACACGAGT-TTTCCT--GAAGG
|| |||||
GTCAAGGCTGAGAACGGAA
X 10 X 20

10. US-09-555-342B-16' (1-20)
US-09-555-342B-8 Sequence 8, Application US/09555342B

Sequence 8, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOVANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 8

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 5 Significance = 0.69
Residue Identity = 31% Matches = 5 Mismatches = 11

Gaps = 0 Conservative Substitutions = 0

X 10 20
GACACGAGTTTCTCTGAAGG

|||||
ATGAACATTCTTCACACGCTC
X 10 X 20

GACACGAGTTTCTCTGAAGG
|||||
AAACGARAAGA-AYGTRTGTGTCTWACACA
10 20 X

11. US-09-555-342B-16' (1-20)
US-09-555-342B-4 Sequence 4, Application US/09555342B

Sequence 4, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555, 342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 4

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.69
Residue Identity = 47% Matches = 9 Mismatches = 7
Gaps = 3 Conservative Substitutions = 0

X 10 X 20
GACACG---AGTTTCTCTGAAGG
|||||
TGCCGAGTTCAGGCTCTTA
X 10 20

12. US-09-555-342B-16' (1-20)
US-09-555-342B-1 Sequence 17, Application US/09555342B

Sequence 17, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555, 342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 17

LENGTH: 29

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 11 Significance = 0.69
Residue Identity = 40% Matches = 12 Mismatches = 7
Gaps = 1 Conservative Substitutions = 0

X 10 20

CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 10

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 11 Significance = 0.48
Residue Identity = 42% Matches = 12 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

10 20 X
TGTGTGARCAYCAYACRTTCTTYCGTTT
||||| | | | |
TCCACCAC-CCGTGTTGCTGTA
X 10 20

3. US-09-555-342B-17' (1-29)
US-09-555-342B-8 Sequence 8, Application US/09555342B

Sequence 8, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 8

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 11 Significance = 0.48
Residue Identity = 28% Matches = 12 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 20 X
TGTGTGARCAYCAYACRTTCTTYCGTTT
||||| | | | |
ATGAACCTC-TTCACCAGCTC
X 10 20

4. US-09-555-342B-17' (1-29)
US-09-555-342B-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 14

NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 22

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 10 Significance = 0.24
Residue Identity = 33% Matches = 11 Mismatches = 9
Gaps = 1 Conservative Substitutions = 0

10 20 X
TGTGTGARCAYCAYACRTTCTTYCGTTT
||||| | | | |
TCGTC-TTCGCTCTCCTCAAT
X 10 20

5. US-09-555-342B-17' (1-29)
US-09-555-342B-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 10 Significance = 0.24
Residue Identity = 33% Matches = 11 Mismatches = 9
Gaps = 1 Conservative Substitutions = 0

10 20 X
TGTGTGARCAYCAYACRTTCTTYCGTTT
||||| | | | |
TCGTC-TTCGCTCTCCTCAAT
X 10 20

6. US-09-555-342B-17' (1-29)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 14

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 9 Significance = 0.24
Residue Identity = 22% Matches = 9 Mismatches = 9
Gaps = 0 Conservative Substitutions = 0

X 10 X
TGTGTGARCAYCAYACRTTCTTCGTTT
| | | | | | | | | |
TTGAGTGTGTGTGTCAG
X 10 20

7. US-09-555-342B-17' (1-29)
US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-50250S

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 9

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 0.24
Residue Identity = 35% Matches = 10 Mismatches = 6
Gaps = 4 Conservative Substitutions = 0

X 10 X 20
TGT-----GTGARCAYCAYACRTTCTTCGTTT
| | | | | | | | | |
GTCAAGGTGAGACGGAA
X 10 20

8. US-09-555-342B-17' (1-29)
US-09-555-342B-1 Sequence 15, Application US/09555342B

Sequence 15, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-50250S

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 15

LENGTH: 25

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 10 Significance = 0.24
Residue Identity = 28% Matches = 10 Mismatches = 15
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
TGTGTGARCAYCAYACRTTCTTCGTTT
| | | | | | | | | |
GCCAAATAGTCACCTTCCAGGAGG
X 10 20 X

9. US-09-555-342B-17' (1-29)
US-09-555-342B-1 Sequence 17, Application US/09555342B

Sequence 17, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-50250S

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 17

LENGTH: 29

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 14 Significance = 0.24
Residue Identity = 14% Matches = 14 Mismatches = 13
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
TGTGTGARCAYCAYACRTTCTTCGTTT
| | | | | | | | | |
AAACGRAAGAYGTRGRTGYTCWACACA
X 10 20 X

10. US-09-555-342B-17' (1-29)
US-09-555-342B-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-50250S

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 21

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.00
Residue Identity = 36% Matches = 11 Mismatches = 7
Gaps = 1 Conservative Substitutions = 0

10 X 20 X
TGTGTGARCAYCA-YACRTTCTTTCGTTT
||| ||| |||
TCACTTCGTGGTTTCAGAGC
X 10 20

10 20 X
TGTGTGARCAYCA-YACRTTCTTTCGTTT
||| ||| |||
CCTTCAGGAAAACTCGTGTC
X 10 20

11. US-09-555-342B-17' (1-29)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 6 Significance = 0.00
Residue Identity = 23% Matches = 6 Mismatches = 11
Gaps = 0 Conservative Substitutions = 0

10 X 20 X
TGTGTGARCAYCA-YACRTTCTTTCGTTT
||| ||| |||
TTCGAGCTCCTAGAGATTGC
X 10 X 20

12. US-09-555-342B-17' (1-29)
US-09-555-342B-1 Sequence 16, Application US/09555342B

Sequence 16, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.00
Residue Identity = 26% Matches = 9 Mismatches = 10
Gaps = 0 Conservative Substitutions = 0

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 7

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 9 Significance = 1.02
Residue Identity = 47% Matches = 9 Mismatches = 10
Gaps = 0 Conservative Substitutions = 0

```

X      10      X
GCAATCTCTAGGAGCTGGAA
| | | | | | | | | |
GTCGATTACGTGGAGAGCTA
X      10      20

```

3. US-09-555-342b-18' (1-20)
US-09-555-342b-4 Sequence 4, Application US/09555342B

Sequence 4, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 4

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 6 Significance = 1.02
Residue Identity = 58% Matches = 7 Mismatches = 4
Gaps = 1 Conservative Substitutions = 0

```

X      X      20
GCA-ATCTCTAGGAGCTGGAA
| | | | | | | | | |
TGCCACAGTTCAGGTCCTCTTA
X      10      20

```

4. US-09-555-342b-18' (1-20)
US-09-555-342b-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 22

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.51
Residue Identity = 52% Matches = 10 Mismatches = 6
Gaps = 3 Conservative Substitutions = 0

```

X      10      X
GCAATC-TCTAGGAGCT--GGAA
| | | | | | | | | |
TCSTCTTCGCTCTCTCTCAAT
X      10      20

```

5. US-09-555-342b-18' (1-20)
US-09-555-342b-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 21

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.51
Residue Identity = 45% Matches = 9 Mismatches = 10
Gaps = 1 Conservative Substitutions = 0

```

X      10      X
GCAATCTCTAGGAGCTGGAA
| | | | | | | | | |
TCACT-TCGTGGTTTCAGAGC
X      10      20

```

6. US-09-555-342b-18' (1-20)
US-09-555-342b-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.51
Residue Identity = 52% Matches = 10 Mismatches = 6
Gaps = 3 Conservative Substitutions = 0

X 10 X
GCAATC-TCTAGGAGCT--GGAA
||| ||| ||| |||
TCGCTCTGCTCTCTCTCAAT
X 10 20

7. US-09-555-342B-18' (1-20)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.51
Residue Identity = 52% Matches = 10 Mismatches = 9
Gaps = 0 Conservative Substitutions = 0

X 10 X
GCAATCTCTAGGAGCTGGAA
||| ||| ||| |||
TTCCAGCTCTAGAGATTGC
X 10 20

8. US-09-555-342B-18' (1-20)
US-09-555-342B-1 Sequence 16, Application US/09555342B

Sequence 16, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.51
Residue Identity = 50% Matches = 9 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 X
GCAATCTCTAGG--AGCTGGAA
||| ||| ||| |||
CCTTCAGGAACAACTCGTCTC
X 10 20

9. US-09-555-342B-18' (1-20)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.51
Residue Identity = 58% Matches = 7 Mismatches = 5
Gaps = 0 Conservative Substitutions = 0

10 X 20
GCAATCTCTAGGAGCTGGAA
||| ||| ||| |||
TTGGAGTTGTGTGTGGTCAG
X 10 X 20

10. US-09-555-342B-18' (1-20)
US-09-555-342B-1 Sequence 13, Application US/09555342B

Sequence 13, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.51
Residue Identity = 50% Matches = 9 Mismatches = 7

Gaps = 2 Conservative Substitutions = 0

X 10 X
GCAATCTCTAGG--AGCTGGAA
|| ||| ||| |
CCTTCAGGAAACTCGTGTC
X 10 20

GCAATCTCTAGGAGCTGGAA
||| |||| |
ATCAGACCCAGCTCCCAAG
X 10 X 20

11. US-09-555-342B-18' (1-20)
US-09-555-342B-1 Sequence 12, Application US/09555342B

Sequence 12, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.51
Residue Identity = 45% Matches = 9 Mismatches = 7
Gaps = 4 Conservative Substitutions = 0

X 10 20
GCAATCTCTAGGAGCTGGAA
||| |||| |
CACAGACCC----AGCTCCCAAC
X 10 X 20

12. US-09-555-342B-18' (1-20)
US-09-555-342B-1 Sequence 11, Application US/09555342B

Sequence 11, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 11
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.51
Residue Identity = 47% Matches = 8 Mismatches = 9
Gaps = 0 Conservative Substitutions = 0

X 10 X 20

PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 7 Optimized Score = 11 Significance = 0.94
Residue Identity = 75% Matches = 12 Mismatches = 2
Gaps = 2 Conservative Substitutions = 0

X 10 X X 20
ATT--GAGGAGCGGAGACGA
||| | ||||| |
GTCGATTACGTGGAGAGCTA
X 10 20

3. US-09-555-342B-19' (1-20)
US-09-555-342B-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 21

LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 7 Significance = 0.47
Residue Identity = 56% Matches = 9 Mismatches = 3
Gaps = 4 Conservative Substitutions = 0

X 10 X 20
ATTGAGG---AGACCGAGACGA
| | | | |
TCACCTCGTGGTTTCAGAGC
X 10 20

4. US-09-555-342B-19' (1-20)
US-09-555-342B-6 Sequence 6, Application US/09555342B

Sequence 6, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 6

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 6 Significance = 0.47
Residue Identity = 35% Matches = 6 Mismatches = 11
Gaps = 0 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGGAGACGA
| | | | |
AAAGACCTCACCCCTCCATCT
X 10 X 20

5. US-09-555-342B-19' (1-20)
US-09-555-342B-3 Sequence 3, Application US/09555342B

Sequence 3, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 3

LENGTH: 25

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 10 Significance = 0.47
Residue Identity = 50% Matches = 12 Mismatches = 8
Gaps = 4 Conservative Substitutions = 0

X 10 20
ATTGAGGAGAGCG---AAGACGA
| | | | |
CATACCGGTAAGTGGGGCAAGACTG
X 10 20 X

6. US-09-555-342B-19' (1-20)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 18

LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.23
Residue Identity = 52% Matches = 10 Mismatches = 6
Gaps = 3 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGAAGACGA
|| || || || || || ||
TT--CCAGCTCTAGA-GATTCC
X 10 X 20

7. US-09-555-342B-19' (1-20)
US-09-555-342B-1 Sequence 16, Application US/09555342B

Sequence 16, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 16
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X
ATTGAGGAGCGC-GAAGACGA
|| || || || || || ||
CCTTCAGGAAACTCGTGTC
X 10 X 20

8. US-09-555-342B-19' (1-20)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue Identity = 45% Matches = 9 Mismatches = 11
Gaps = 0 Conservative Substitutions = 0

X 10 X
ATTGAGGAGCGAAGACGA
|| || || || || || ||
TTGGAGTTGTGTGGTCAG
X 10 X 20

9. US-09-555-342B-19' (1-20)
US-09-555-342B-1 Sequence 13, Application US/09555342B

Sequence 13, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X
ATTGAGGAGAGC-GAAGACGA
|| || || || || || ||
CCTTCAGGAAACTCGTGTC
X 10 X 20

10. US-09-555-342B-19' (1-20)
US-09-555-342B-1 Sequence 12, Application US/09555342B

Sequence 12, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 20

TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:

Initial Score = 4 Optimized Score = 6 Significance = 0.23

Residue Identity = 37% Matches = 6 Mismatches = 10
Gaps = 0 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGCAAGACGA
| | | | |
CACAGACCGAGCTCCCAAC
X 10 X 20

X 10 X
ATTGAGGAGCGCAAGACGA
| | | | |
GTCAAGCGCTGAGAACGGGAA
X 10 20

11. US-09-555-342B-19' (1-20)
US-09-555-342B-1 Sequence 11, Application US/09555342B

Sequence 11, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 11
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.23
Residue Identity = 43% Matches = 7 Mismatches = 9
Gaps = 0 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGCAAGACGA
| | | | |
ATCAGACCGAGCTCCCAAG
X 10 X 20

12. US-09-555-342B-19' (1-20)
US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 9
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue Identity = 47% Matches = 9 Mismatches = 10
Gaps = 0 Conservative Substitutions = 0

IntelliGenetics

FastDB - Fast Pairwise Comparison of Sequences
Release 5.4

Results file us-09-555-342b-20-inv.res made by sdavid on Tue 26 Nov 102 15:59:47-PST.

Query sequence being compared:US-09-555-342B-20' (1-23)
 Number of sequences searched: 21
 Number of scores above cutoff: 12

Results of the initial comparison of US-09-555-342B-20' (1-23) with:
File : US09555342B.seq

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	SCORE	STDEV
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18	100	0
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PARAMETERS

Similarity matrix
Mismatch penalty
Gap penalty
Gap size penalty
Cutoff score
Randomization group

Unitary	K-tuple	Joining penalty	Window size
1			
1.00			
0.33			
1			
0			

SEARCH STATISTICS

Scores:	Mean	Median	Standard Deviation
	2	5	2.77

Times:	CPU	Total Elapsed
	00:00:00.00	00:00:00.00

Number of residues:	3864
Number of sequences searched:	21
Number of scores above cutoff:	12

The scores below are sorted by initial score. Significance is calculated based on initial score. A 100% identical sequence to the query sequence was not found.

The list of best scores is:

Sequence Name	Description	Init.	Opt.
		Length Score	Sig. Frame
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	***	3 standard deviations above mean	***
1. US-09-555-342B-1	Sequence 1, Application U	3442	11
	***	0 standard deviation from mean	***
2. US-09-555-342B-2	Sequence 22, Application	20	4
3. US-09-555-342B-1	Sequence 19, Application	20	4
4. US-09-555-342B-1	Sequence 14, Application	20	4
5. US-09-555-342B-1	Sequence 12, Application	20	4
6. US-09-555-342B-1	Sequence 11, Application	20	4
7. US-09-555-342B-1	Sequence 10, Application	20	4
8. US-09-555-342B-7	Sequence 7, Application U	20	4
9. US-09-555-342B-6	Sequence 6, Application U	20	4
10. US-09-555-342B-5	Sequence 5, Application U	20	4
11. US-09-555-342B-3	Sequence 3, Application U	25	4
12. US-09-555-342B-1	Sequence 17, Application	29	4

1. US-09-555-342B-20' (1-23)
US-09-555-342B-1 Sequence 1, Application US/09555342B

Sequence 1. Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-50250S

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 1

LENGTH: 3442

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (49)..(3183)

-	Initial Score	-	11	Optimized Score	-	14	Significance	=	3.25
-	Residue Identity	-	62%	Matches	-	17	Mismatches	=	6
-	Gaps	-		Conservative Substitutions	-	4		=	0

		X	10
		TC-CGTGCGCC-TGCTTGGTTA-	
		TCTCTCAGACAGCGCGCTTTTTAA	
ATTACACCTGTCTGAAATCAAAAAT	3270	3320	3330
3280	3290	3300	3310

2. US-09-555-342B-20' (1-23)
US-09-555-342B-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 22

LENGTH: 20
TYPE: DNA

ORGANISM: Artificial sequence
FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.72
Residue Identity = 60% Matches = 12 Mismatches = 5
Gaps = 3 Conservative Substitutions = 0

X 10 X
TCCGTC--CGC-CTGCTGTTTACCCG
|||| ||| ||| ||
TCGCTTCGCTCTCTCTCAAT
X 10 20

3. US-09-555-342b-20' (1-23)
US-09-555-342b-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555, 342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19
LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.72
Residue Identity = 60% Matches = 12 Mismatches = 5
Gaps = 3 Conservative Substitutions = 0

X 10 X
TCCGTC--CGC-CTGCTGTTTACCCG
|||| ||| ||| ||
TCGCTTCGCTCTCTCTCAAT
X 10 20

4. US-09-555-342b-20' (1-23)
US-09-555-342b-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555, 342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.72
Residue Identity = 40% Matches = 8 Mismatches = 12
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
TCCGTCGCGCTGCTGTTACCCG
||| ||| ||| ||
TTGGAGTTGTGTGTGTCAG
X 10 20

5. US-09-555-342b-20' (1-23)
US-09-555-342b-1 Sequence 12, Application US/09555342B

Sequence 12, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555, 342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 12

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 6 Significance = 0.72
Residue Identity = 33% Matches = 6 Mismatches = 12
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
TCCGTCGCGCTGCTGTTACCCG
| | | | | | | |
CACAGACCCAGCTCCCAAC
X 10 20

6. US-09-555-342b-20' (1-23)
US-09-555-342b-1 Sequence 11, Application US/09555342B

Sequence 11, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555, 342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 11

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 6 Significance = 0.72
Residue Identity = 38% Matches = 7 Mismatches = 9
Gaps = 2 Conservative Substitutions = 0

10 X
TCCGTCGCGCTG--CTGTGTACCCG
| | | | |
ATCAGACCCAGCTCCCAAG
X 10 20

7. US-09-555-342B-20' (1-23)
US-09-555-342B-1 Sequence 10, Application US/09555342B

Sequence 10, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 10

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 11 Significance = 0.72
Residue Identity = 57% Matches = 11 Mismatches = 8
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
TCCGTCGCGCTGCTGTGTACCCG
| | | | |
TCCACCACCCCTGTGTGTA
X 10 20

8. US-09-555-342B-20' (1-23)
US-09-555-342B-7 Sequence 7, Application US/09555342B

Sequence 7, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 7

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.72
Residue Identity = 45% Matches = 9 Mismatches = 10
Gaps = 1 Conservative Substitutions = 0

X 10 20 X
TCCGTCGCGCTGCTGTGTACCCG
| | | | |
GT-CGATTACGTGGAGAGCTA
X 10 20

9. US-09-555-342B-20' (1-23)
US-09-555-342B-6 Sequence 6, Application US/09555342B

Sequence 6, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 6

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.72
Residue Identity = 35% Matches = 7 Mismatches = 13
Gaps = 0 Conservative Substitutions = 0

X 10 X
TCCGTCGCGCTGCTGTGTACCCG
| | | | |
AAAGACCTCACCCCTCCATCT
X 10 20

10. US-09-555-342B-20' (1-23)
US-09-555-342B-5 Sequence 5, Application US/09555342B

Sequence 5, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 5

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.72
Residue Identity = 47% Matches = 9 Mismatches = 10
Gaps = 0 Conservative Substitutions = 0

X 10 20 X
TCCGTCGCGCTGCTTGTACCG
| | | | |
TGCTACTTCATCGACCCAT
X 10 20

X 10 20 X
TCCGTCGCGCTGCTTGTACCG
| | | | |
AAACGAAAGAAAGTGTGTCTWACACA
X 10 20 X

11. US-09-555-342B-20' (1-23)
US-09-555-342B-3 Sequence 3, Application US/09555342B

Sequence 3, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 3

LENGTH: 25

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.72
Residue Identity = 46% Matches = 7 Mismatches = 8
Gaps = 0 Conservative Substitutions = 0

10 20 X
TCCGTCGCGCTGCTTGTACCG
| | | | |
CATACCGGTAAGTGGGCAAGACTG
X 10 20

12. US-09-555-342B-20' (1-23)
US-09-555-342B-1 Sequence 17, Application US/09555342B

Sequence 17, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 17

LENGTH: 29

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 10 Significance = 0.72
Residue Identity = 34% Matches = 10 Mismatches = 13
Gaps = 0 Conservative Substitutions = 0

PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 8 Optimized Score = 8 Significance = 1.80
Residue Identity = 80% Matches = 8 Mismatches = 2
Gaps = 0 Conservative Substitutions = 0

X X 20
GCTCTGAACACCAAGTGA
|||||
CACAGACCCAGCTCCCAAC
10 20

3. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 15, Application US/09555342B

Sequence 15, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 15

LENGTH: 25

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 6 Optimized Score = 9 Significance = 1.08
Residue Identity = 52% Matches = 9 Mismatches = 8
Gaps = 0 Conservative Substitutions = 0

X 10 X 20
GCTCTGAACACCAAGTGA
|||
GCCAAATAGTCCCTTCACGAGG
10 20 X

4. US-09-555-342B-21' (1-20)
US-09-555-342B-2 Sequence 22, Application US/09555342B

Sequence 22, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 22
LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 7 Significance = 0.72
Residue Identity = 56% Matches = 9 Mismatches = 3
Gaps = 4 Conservative Substitutions = 0

X 10 X 20
GCTCTGAACACCAAGTGA
|||||
TCGCTCTCGCTCT---CCTCAAT
10 20

5. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 19, Application US/09555342B

Sequence 19, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 7 Significance = 0.72
Residue Identity = 56% Matches = 9 Mismatches = 3
Gaps = 4 Conservative Substitutions = 0

X 10 X 20
GCTCTGAACACCAAGTGA
|||||
TCGCTCTCGCTCT---CCTCAAT
10 20

6. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 10, Application US/09555342B

Sequence 10, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

PRIOR FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 10

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 8 Significance = 0.72
Residue Identity = 47% Matches = 9 Mismatches = 9
Gaps = 1 Conservative Substitutions = 0

X 10
GCTCTGAACACGACGAAG-TGA
||| ||| ||| |||
TCCACCACCCCTGTTGCTGTA
X 10 20

7. US-09-555-342B-21' (1-20)
US-09-555-342B-3 Sequence 3, Application US/09555342B

Sequence 3, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 3

LENGTH: 25

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 9 Significance = 0.72
Residue Identity = 60% Matches = 9 Mismatches = 6
Gaps = 0 Conservative Substitutions = 0

X 10 20
GCTCTGAACACGACGAAGTGA
||| ||| ||| |||
CATACCGCTAAGTGGGCAAGACTG
X 10 X 20

8. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 17, Application US/09555342B

Sequence 17, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 17

LENGTH: 29

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.36
Residue Identity = 55% Matches = 11 Mismatches = 7

Initial Score = 5 Optimized Score = 10 Significance = 0.72
Residue Identity = 36% Matches = 11 Mismatches = 7
Gaps = 1 Conservative Substitutions = 0

X 10 X
GCTCTGAACACGACGAAGTGA
||| ||| ||| |||
AAACGCAAGAAYG-TRTGRTGYTCWACACA
X 10 20

9. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 18

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.36
Residue Identity = 45% Matches = 9 Mismatches = 10
Gaps = 1 Conservative Substitutions = 0

X 10 X
GCTCTGAACACGACGA-AGTGA
||| ||| ||| |||
TTCCAGCTCCTAGAGATTGC
X 10 20

10. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 16, Application US/09555342B

Sequence 16, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOYANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 16

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Gaps = 2 Conservative Substitutions = 0

X 10 X
GCTC-TGAACACGAGTGA
|| |||| | ||
CCTTCAGGAAACTCG-TGTC
X 10 20

GCTCTGAAACACGAGTGA
|||| |||
ATCAGACCGAGTCCCAAG
10 20

11. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 13, Application US/09555342B

Sequence 13, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.36
Residue Identity = 55% Matches = 11 Mismatches = 7
Gaps = 2 Conservative Substitutions = 0

X 10 X
GCTC-TGAACACGAGTGA
|| |||| | ||
CCTTCAGGAAACTCG-TGTC
X 10 20

12. US-09-555-342B-21' (1-20)
US-09-555-342B-1 Sequence 11, Application US/09555342B

Sequence 11, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 11
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.36
Residue Identity = 70% Matches = 7 Mismatches = 3
Gaps = 0 Conservative Substitutions = 0

X X 20

PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7

LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 7 Optimized Score = 11 Significance = 0.94
Residue Identity = 75% Matches = 12 Mismatches = 2
Gaps = 2 Conservative Substitutions = 0

X 10 X 20
ATT--GAGGAGCGAAGACGA
||| | ||||| |
GTCGATTACGTGGAGAGCTA
X 10 20

3. US-09-555-342B-22' (1-20)
US-09-555-342B-2 Sequence 21, Application US/09555342B

Sequence 21, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21

LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 7 Significance = 0.47
Residue Identity = 56% Matches = 9 Mismatches = 3
Gaps = 4 Conservative Substitutions = 0

X 10 X 20
ATTGAGG----AGAGCGAAGACGA
||| | ||||| |
TCACCTTCGTGGTTTCAGAGC
X 10 20

4. US-09-555-342B-22' (1-20)
US-09-555-342B-6 Sequence 6, Application US/09555342B

Sequence 6, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6
LENGTH: 20
TYPE: DNA

ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 6 Significance = 0.47
Residue Identity = 35% Matches = 6 Mismatches = 11
Gaps = 0 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGGAAGACGA
||| | ||||| |
AAAGACCTCACCCTCCATCT
X 10 X 20

5. US-09-555-342B-22' (1-20)
US-09-555-342B-3 Sequence 3, Application US/09555342B

Sequence 3, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3

LENGTH: 25
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 5 Optimized Score = 10 Significance = 0.47
Residue Identity = 50% Matches = 12 Mismatches = 8
Gaps = 4 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGG---AAGACGA
||| | ||||| |
CATACCGGTAAGTGGGGCAAGACTG
X 10 20 X

6. US-09-555-342B-22' (1-20)
US-09-555-342B-1 Sequence 18, Application US/09555342B

Sequence 18, Application US/09555342B

GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555,342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 18
LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 8 Significance = 0.23
Residue Identity = 52% Matches = 10 Mismatches = 6
Gaps = 3 Conservative Substitutions = 0

X 10 20

ATTGAGGAGAGCGAAGACGA

|| || || || || ||

TT--CCAGCTCTAGAGATTGC

X 10 20

7. US-09-555-342B-22' (1-20)
US-09-555-342B-1 Sequence 16, Application US/09555342B

Sequence 16, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOFANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 16

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X

ATTGAGGAGAGC-GAAGACGA

|| || || || || ||

CCTTCAGGAAACTCGTGTC

X 10 20

8. US-09-555-342B-22' (1-20)
US-09-555-342B-1 Sequence 14, Application US/09555342B

Sequence 14, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOFANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 14

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 6 Significance = 0.23

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue Identity = 45% Matches = 9 Mismatches = 11
Gaps = 0 Conservative Substitutions = 0

X 10 X

ATTGAGGAGAGCGAAGACGA

|| || || || || ||

TTGGAGTTCTGTCTGGTCAG

X 10 20

9. US-09-555-342B-22' (1-20)
US-09-555-342B-1 Sequence 13, Application US/09555342B

Sequence 13, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOFANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 13

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue Identity = 52% Matches = 10 Mismatches = 8
Gaps = 1 Conservative Substitutions = 0

X 10 X

ATTGAGGAGAGC-GAAGACGA

|| || || || || ||

CCTTCAGGAAACTCGTGTC

X 10 20

10. US-09-555-342B-22' (1-20)
US-09-555-342B-1 Sequence 12, Application US/09555342B

Sequence 12, Application US/09555342B

GENERAL INFORMATION:

APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA

APPLICANT: KATO, Yukio

APPLICANT: KAWAMOTO, Takeshi

APPLICANT: KOFANO, Yasuhiko

TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene

FILE REFERENCE: 046124-5025US

CURRENT APPLICATION NUMBER: US/09/555,342B

CURRENT FILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: PCT/JP98/05348

PRIOR FILING DATE: 1998-11-27

NUMBER OF SEQ ID NOS: 30

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 12

LENGTH: 20

TYPE: DNA

ORGANISM: Artificial sequence

FEATURE:

OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 6 Significance = 0.23

Residue identity = 37% Matches = 10
Gaps = 0 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGGAAGACGA
| | | | |
CACAGACCCAGCTCCCAAC
X 10 X 20

X 10 X
ATTGAGGAGCGGAAGACGA
| | | | |
GTCAAGGCTGAGAACGGGAA
X 10 20

11. US-09-555-342B-22' (1-20)
US-09-555-342B-1 Sequence 11, Application US/09555342B

Sequence 11, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 11
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 7 Significance = 0.23
Residue identity = 43% Matches = 9
Gaps = 0 Conservative Substitutions = 0

X 10 20
ATTGAGGAGCGGAAGACGA
| | | | |
ATCAGACCCAGCTCCCAAG
X 10 X 20

12. US-09-555-342B-22' (1-20)
US-09-555-342B-9 Sequence 9, Application US/09555342B

Sequence 9, Application US/09555342B
GENERAL INFORMATION:
APPLICANT: CHUGAI SEIYAKU KABUSHIKI KAISHA
APPLICANT: KATO, Yukio
APPLICANT: KAWAMOTO, Takeshi
APPLICANT: KOYANO, Yasuhiko
TITLE OF INVENTION: Human Fetus Chondrocyte-Derived Gene
FILE REFERENCE: 046124-5025US
CURRENT APPLICATION NUMBER: US/09/555, 342B
CURRENT FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: PCT/JP98/05348
PRIOR FILING DATE: 1998-11-27
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 9
LENGTH: 20
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: probe

Initial Score = 4 Optimized Score = 9 Significance = 0.23
Residue identity = 47% Matches = 10
Gaps = 0 Conservative Substitutions = 0